

I CLAIM:

1. A data collection signal processor in an electro-optical reader operative for scanning indicia with light in successive scans across the indicia, comprising:
 - a) a sensor for collecting light reflected off the indicia for each scan, and for generating an analog signal indicative of light intensity of the reflected light collected by the sensor for each scan;
 - b) a filter having a bandpass characteristic for filtering the analog signal to produce a filtered analog signal during one of the scans;
 - c) a digitizer circuit for digitizing the filtered analog signal to produce a pair of digitized signals for each scan;
 - d) a controller for decoding the digitized signals for each scan, for generating a data output signal when one of the digitized signals has been decoded to signify that the indicia has been successfully read; and
 - e) a control component operatively connected to the controller for changing the bandpass characteristic of the filter to produce a differently filtered analog signal during another scan subsequent to said one scan.
2. The processor of claim 1, wherein the bandpass characteristic during said one scan has a high bandwidth, and wherein the control component changes the bandpass characteristic during said other subsequent scan to have a low bandwidth less than said high bandwidth.
3. The processor of claim 2, wherein the control component is also operative for simultaneously increasing a gain of the filtered analog signal during the subsequent scan.

4. The processor of claim 1, and a threshold generator for generating a pair of thresholds for each scan.

5. The processor of claim 1, wherein one of the thresholds is fixed, and the other of the thresholds is variable.

6. The processor of claim 4, wherein the pair of thresholds is different for successive scans.

7. The processor of claim 1, wherein the controller is operative for generating a control signal when the indicia has not been successfully read, and wherein the control component is operative for changing the bandpass characteristic in response to generation of the control signal.

8. A data collection method in an electro-optical reader operative for scanning indicia with light in successive scans across the indicia, comprising the steps of:

a) collecting light reflected off the indicia for each scan, and generating an analog signal indicative of light intensity of the reflected light collected for each scan;

b) filtering the analog signal with a bandpass characteristic to produce a filtered analog signal during one of the scans;

c) digitizing the filtered analog signal to produce a pair of digitized signals for each scan;

d) decoding the digitized signals for each scan, and generating a data output signal when one of the digitized signals has been decoded to signify that the indicia has been successfully read; and

e) changing the bandpass characteristic to produce a differently filtered analog signal during another scan subsequent to said one scan.

9. The method of claim 8, wherein the bandpass characteristic during said one scan has a high bandwidth, and wherein the bandpass characteristic is changed during said other subsequent scan to have a low bandwidth less than said high bandwidth.

10. The method of claim 9, and the step of simultaneously increasing a gain of the filtered analog signal during the subsequent scan.

11. The method of claim 8, and the step of generating a pair of thresholds for each scan.

12. The method of claim 11, wherein one of the thresholds is fixed, and the other of the thresholds is variable.

13. The method of claim 11, wherein the pair of thresholds is different for successive scans.

14. The method of claim 8, and the step of generating a control signal when the indicia has not been successfully read, and wherein the changing step is performed in response to the generation of the control signal.